



UNITED NATIONS
ECONOMIC AND SOCIAL COUNCIL



Distr.
LIMITED

E/ECA/HUS/16
June 1985

ENGLISH
Original: FRENCH

ECONOMIC COMMISSION FOR AFRICA

Third meeting of the Joint Intergovernmental
Regional Committee on Human Settlements and Environment

22 - 26 July 1985, Addis Ababa, Ethiopia

GUIDELINES AND INDICATORS FOR PROMOTING CO-OPERATIVE
AND SELF-HELP HOUSING AND OTHER FORMS OF PUBLIC PARTICIPATION

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INTRODUCTION

1. The current housing crisis in Africa is well known, but it is worth while going over the extent of the problem once again. The alarming growth of slums and shanty towns in the areas around all large African cities is directly related to this housing crisis, with all that that implies in terms of living conditions for the people who inhabit them.
2. The people most concerned by this housing problem are, naturally, the poorest who make up the great majority in African cities.
3. The urgency and gravity of the housing situation in third world countries in general and Africa in particular provide justification for the following recommendations made at the 1976 Vancouver Conference: "national housing policies must aim at providing adequate shelter and services to the lower income groups, distributing available resources on the basis of greatest needs", "a major part of housing policy efforts should consist of programmes and instruments which actively assist people in continuing to provide better quality housing for themselves, individually or co-operatively".^{1/} It was for the same reasons that the United Nations General Assembly in December 1981 adopted Resolution 36/71, making 1987 the International Year of shelter for the Homeless in developing countries.
4. The reason for the housing crisis on the African continent is the lack of balance between the consistently growing demand for housing, the ability of African countries to meet this demand for various reasons, including very high construction costs, and housing policies ill-suited to the needs of population.
5. The very high demand for the housing in African countries is principally the result of high urban growth on the continent; over the past twenty years such growth has averaged 5 per cent.
6. Experience in various African countries has shown that the production of traditional types of housing by the conventional sector is no answer to the crisis because of the very high cost of construction; on the other hand, co-operative, self-help and other forms of housing policy involving public participation have in many cases made possible the mass production of low-cost housing and seem to be appropriate solutions to the housing situation in Africa.
7. It is, therefore, necessary to promote co-operative housing, self-help housing schemes and other forms of public participation.
8. To promote means "advance, help forward, encourage, support actively, initiate..."^{2/}
9. The approach taken in this report - promoting co-operative housing, self-help housing schemes and other forms of public participation - is a dynamic one. The aim is to break out of the formal framework of recommendations so that African countries can provide themselves with the ways and means of effectively promoting co-operative and self-help housing

^{1/} See reference 7.

^{2/} The Consise Oxford Dictionary of Current English, 6th ed., A.B. Sykes, ed.,

schemes and other forms of public participation.

10. The report begins by outlining Africa's current housing problems, then it defines the concepts of co-operative housing, self-help housing and other forms of public participation. The third, and most important, section dwells on the need to promote such policies. A final section puts forward guidelines and indicators for promoting co-operative housing, self-help housing and other forms of public participation.

THE HOUSING SITUATION IN AFRICA: SCOPE OF THE PROBLEM

11. Rapid urban growth in Africa in the post-independence years has led to a very high demand for housing which, for economic reasons, most African countries cannot meet.

12. Over the past 10 years urban growth in Africa has been the highest in the world, at 5.3 per cent, as against 3.6 per cent in Latin America and 1.1 per cent in Europe.^{3/} It has been estimated that, leaving aside the natural demographic growth of the urban population, almost 90 per cent of urban growth in Africa is the result of migration from the country side to the cities.

13. To meet the demand for housing prompted by this high urban growth on the African continent, it was estimated in 1976 that between 10 and 13 new housing units per 1000 inhabitants would have to be built, ^{4/} while the need was for 8 to 10 units per 1000 inhabitants for all other regions of the world. In 1980 the African countries' housing requirements were put at 1.7 million new units, ^{5/} furthermore, 3.25 million units needed to be built to house the 19.5 million urban homeless (assuming two rooms per unit and three people per room). ^{6/} The Ivory Coast alone was 50,000 housing units short in 1976.

14. In 1976 ^{7/} Africa was building on average 3 housing units per 1000 inhabitants per year, which is well below the norm of 10 housing units per 1000 inhabitants recommended by the United Nations.^{3/}

15. One of the many direct consequences of this housing situation has been the growth round all large African cities of shanty towns in which the least well-off segments of the urban population live.

16. Today it is estimated that approximately 50 to 80 per cent of urban dwellers in most African countries live in shanty towns, often in very difficult conditions, completely bereft of such minimum provisions as a supply of drinking water or sanitary facilities, in homes built of flimsy or semi-durable stuff such as packing cases, "salvaged" materials and so forth (it is estimated ^{9/} that some 26 per cent of the people living in shanty towns inhabit makeshift shelters and are virtually homeless).

^{3/} See Annex II: Average yearly urban growth.

^{4/} See reference 9, p.19.

^{5/} See reference 5, p.19.

^{6/} E/ECA/HUS/7, p.8

^{7/} See reference 9, p.19.

^{8/} E/ECA/HUS/1, p.7.

^{9/} E/ECA/HUS/7, p.7.

17. A survey in 18 African countries showed that 25 to 30 per cent of the urban population lives on incomes markedly below the urban poverty threshold.^{10/} According to a survey conducted among shanty-town dwellers in Kenya and Zambia, average monthly income per household was 65 US dollars in Lusaka (Georgetown area) and 74 dollars in Nairobi (Kawangware) at a time when the absolute poverty thresholds for these two cities were 175 and 122 dollars respectively.^{11/}

18. Many African countries have realized that the traditional building sector was not providing enough housing to meet the needs of their populations principally because of the very high cost of housing construction.

Table 1. African countries within highest concentrations of urban poor

Country	Number of urban poor (thousands)	Urban population in 1975 (thousands)
Nigeria	3,760 (1975)	12,000
Egypt	3,500 (1976)	16,000
Morocco	3,470 (1977)	6,500
Ethiopia	2,000 (1977)	3,000
Zaire	1,700 (1977)	8,500
Algerie	1,400 (1977)	8,500

Source . Mausouri, Z, Rapport du séminaire sur l'amélioration de l'habitat urbain (seminar organized in Abidjan in 1980 by UNCHS (Habitat) and the World Bank Economic Development Institute) (1980).

19. In wide-ranging attempts by African countries to cope with the crisis of mass housing, co-operative and self-help schemes and other forms of public participation have proved to be apt solutions.

CO-OPERATIVE HOUSING, SELF-HELP HOUSING AND OTHER FORMS OF PUBLIC PARTICIPATION

20. The concepts of co-operative and self-help housing and other forms of public participation vary from one African country to another.

A. Co-operative housing

21. According to a document published by the United Nations,^{12/} housing co-operatives are "any form of organization and action in which groups of people, small or large, undertake co-operatively to obtain housing to be owned by those who occupy it."

22. Housing co-operatives can be broadly defined as voluntary associations of people based on mutual help and solidarity with common objectives: the production of low-cost housing and the provision of related services for the benefit of the co-operating parties.

^{10/} See reference 5, p.10.

^{11/} E/ECA/HUS/7, p.13.

^{12/} See reference 1, p.2.

Generally, such associations bring together people with common interest belonging to one social and occupational category or one basic group of professions (for example, national education co-operatives or craftsmen's co-operatives); grouping of other kinds can, however, exist.

23. The purpose of a housing co-operative is to alleviate the shortage of housing due to shortages of the means of production in the public sector by using the personal initiative of the co-operating parties to improve their domestic living conditions. The underlying principle is that they do not make profits on their activities, dividing tasks and benefits equally among the membership irrespective of members' initial contributions (financial or "sweat equity").

24. Housing co-operatives are not building contractors; their rôle is generally to oversee the building work and includes acquisition of the land and the management of building schemes. The housing built is rented out or put up for sale. In the case of rental, the co-operative members pay rent which entitles them to enjoyment of the housing they occupy; in the case of sale, they acquire title to the housing in accordance with an acquisition process laid down and accepted in advance.

25. Co-operatives can be "short-lived" (in Egypt for example), being dissolved upon completion of the building programmes, or "permanent" managing the housing upon completion and thus becoming building management co-operatives.

26. Under this topic of how housing co-operatives function, more detailed attention will be paid to funding problems since the very nature of co-operative activities requires substantial investments to be recouped over long periods.

(i) The funding of housing co-operatives

27. A number of bodies and institutions are involved in financing affordable housing in Africa. They include international banks such as the World Bank, through its Agency for International Development (AID) by bilateral government bodies, quasi-governmental bodies such as the African Development Bank (ADB) through "Shelter Afrique", its specialized subsidiary set up in response to the 1978 recommendation by the United Nations Centre for Human Settlements (UNCHS), the Islamic Development Bank (IDB) and the Arab Bank for Economic Development in Africa (ABEDA).

28. Very few bodies or institutions, however, specialize in funding co-operative housing in African countries. Housing co-operatives set most of their funds from the co-operative sector in the form of savings and credit associations; it is estimated that 20 to 30 per cent of the loans granted by these associations (medium-term, 3 to 5 year loans at very low interest 1 per cent or so are for co-operative housing construction.^{13/}

29. In addition to the traditional financial sector which includes private and semi-private institutions (building societies, savings and lending banks, ordinary banks and insurance companies), Government institutions and bodies such as building societies play a substantial part in the funding of housing co-operatives. In eastern and central African countries, for example, it is usually national housing boards that provide the funds for co-operative housing construction through local authorities which are responsible for managing the building projects and guaranteeing repayment of the boards' loans.

^{13/} See reference 1, p.3.

30. The other sources of funds for co-operative housing are co-operative members' savings and the financial help given to them by their relatives and friends.

B. Self-help housing

31. The aim of self-help housing schemes is to minimize intervention by the public sector by making maximum use of private-sector labour and resources. Dwellings are constructed in successive states depending on their owners' financial means and housing needs, and in most cases the owner does not become directly involved in the construction work.

32. Broadly speaking, there are two types of self-help housing projects in Africa: site-and-services schemes and plot-plus-core-unit system.

33. In the case of site-and-service schemes, the public authorities provide individuals with plots of drained land equipped with a minimum of basic infrastructure, such as primary road networks, drinking water supplies and sewage facilities. The plot-plus-core-unit system entails providing individuals with drained plots as in the preceding example, but these plots now also contain the rudimentary fabric of the eventual dwellings: foundations, structural elements, some building materials etc.

34. The principal features of interest in self-help housing schemes are how the building materials to complete the work are supplied and how the actual building work is managed.

(i) Building material supplies

35. The various ways used to provide building materials are shaped by the living standards of the people concerned (low and irregular income) and the process used in building self-help housing ("step-by-step" construction). Building materials are purchased in small quantities as the work proceeds, reducing transport and warehousing costs to a minimum since, in view of the owners' irregular incomes, cash payment is always demanded.

36. The arrangements for supplying building materials tend to be informal and flexible because there are no rigidly laid down administrative or commercial procedures. There are several different systems, each with its advantages and disadvantages.

37. The owner of the dwelling can get his supplies from the main contractor. The principal advantage of this is that he can get the building materials he needs regularly; on the other hand, the main contractor's administrative procedures can sometimes be lengthy.

38. The owner can also obtain materials directly from the suppliers against purchase invoices supplied by the contractor. As such invoices can only be used to buy building materials, giving credit in this form ensures that it is really used for housing construction. Individuals can, however, experience difficulties in obtaining building materials: transport problems of the construction site is far from large urban centres, suppliers' out of stock etc.

39. There is another system of supply which allows checks to be made on how the credit granted to the owner is used: the owner can claim reimbursement of sums already spent on

building materials.

40. Whatever means is used to provide building materials the main idea is to ensure that the loans granted are actually used to purchase materials. Experience in a number of African countries has been that credit given to low-income earners for the construction of self-help housing tends to be used for other purposes, and this serves to perpetuate rather than resolve housing problems.

(ii) Management of self-help construction work

41. According to an ILO document, construction management can be defined as "the overall planning, control and co-ordination of a project from inception and completion aimed at meeting a client's requirements and ensuring completion on time, within cost and its required quality standards".^{14/}

42. The characteristic feature of construction work on self-help housing is its flexibility, due to the absence of rigid procedures which enables the contractor to make allowance for the irregular flows of money from the people concerned and the piecemeal progress on construction.

C. Other forms of public participation

43. Public participation in the production of low-income housing varies in form between countries according to the experience they have acquired.

44. According to the report of the United Nations Conference on Human Settlements ^{15/} public participation makes possible the dynamic incorporation of the people in the economic, social and political life of a country in order to secure effective participation in collective decisions on the production, consumption and distribution of goods. For the purposes of this document "goods" means housing for people on low incomes.

45. Participation may be horizontal, between governmental decision-making bodies at the same level, or vertical.

46. Vertical participation may be "top-down" or vice versa, the base being the least well-off sectors of the population and the top being the governmental bodies with the power to take decisions. "Top-down" popular participation implies that the public authorities agree with the less well-off members of the population on the decisions taken to deal with their housing problems; "bottom-up" popular participation suggests involvement by the less well-off sectors in decisions by governmental bodies on housing policies and programmes. This latter type of popular participation lies at the heart of a democratic system of public participation.

47. The purpose of public participation is to make the population at large more keenly aware of the extent of housing problems so that it will itself look for alternative solutions.

^{14/} See reference 6, p. 10.

^{15/} See reference 7, pp.71-72.

48. Co-operative and self-help housing and other forms of public participation are helping to overcome the housing crisis in the bulk of African countries although the contribution they make varies according to each country's individual experience. Emphasis must be laid on the need to promote co-operative and self-help housing and other forms of public participation since such projects are acceptable alternative solutions to the housing situation in Africa; in the face, moreover, of steadily rising demand for housing by a constantly growing population whose incomes are not growing so fast, projects of these kinds, which permit housing to be produced at relatively low cost, would appear to be appropriate alternatives.

THE CASE FOR PROMOTING CO-OPERATIVE AND SELF-HELP HOUSING AND OTHER FORMS OF PUBLIC PARTICIPATION

A. How co-operative and self-help housing and other forms of public participation can help to resolve housing problems in African countries

(i) Co-operative housing

49. Housing co-operatives in many European countries have done a great deal to resolve the housing crisis by increasing the housing production capacity of the public and private sectors.

50. For a variety of reasons housing co-operatives in Africa have not on the whole been so successful in encouraging the large-scale production of low-cost housing for the least well-off segments of the population. It is accepted that housing co-operatives are not the only solution to housing problems in African countries, and alternative solutions must be sought.

51. There have, however, been some success stories ^{16/} in which housing co-operatives have proved to be an effective way of speeding up the production of low-cost housing for low-income earners. These are in Botswana and Lesotho (Lesotho Low-cost Housing Company Ltd., and the Mohalalito Co-operative Housing Society, for example). In the 1970s in the United Republic of Tanzania a pilot project by the Mwenge Co-operative Housing Society resulted in the construction of 400 housing units. In Ghana, the Tema Housing Co-operative Society L'd. built 100 housing units between 1973 and 1978.

(ii) Self-help housing

52. Generally speaking, self-help housing associations in African countries have produced more housing than co-operatives, mostly using the serviced-site approach. Plot-plus-core-unit schemes and improved sanitation in shanty towns are also effective ways of improving housing conditions for people on low incomes.

53. Some examples of interesting self-help housing construction projects may be cited here: the pilot project of 200 units built using local materials in Khartoum (Sudan), and the project at Mbabane (Swaziland). ^{17/} In the latter case 24 families joined forces to provide the labour and funds for housing construction using loans taken out individually by each family from the Swaziland Development and Savings Bank; the families handled 85 per cent of all work involved in building 96 housing units.

^{16/} See reference 8.

^{17/} Ibid.

54. In Kenya as in other African countries unserviced society schemes have enabled low-cost housing to be built to suit the requirements and financial limitations of low-income earners. Fifty per cent of the housing programmes in Kenya's most recent plan (1979-1983) were aimed at low-income earners (serviced sites, improvements to spontaneous settlements, etc.). 18/

B. Co-operative and self-help housing and other forms of public participation:
ADVantages and problems

55. Co-operative and self-help housing and other forms of public participation are an efficient way of co-ordinating efforts by the public authorities and private entrepreneurs to meet housing demand, particularly from low-income earners. Such policies make for optimum use if resources African countries are short of (finance, technology, qualified labour etc.) in the large-scale production of high-quality housing at low cost.

56. Such policies prompt the general public to take an interest in the housing crisis and join in the search for solutions that suit local condition. Housing co-operatives can serve as go-betweens and encourage dialogue between individuals and public authorities, private and semi-private organizations and institutions directly involved in the housing sector (local government, banks, savings and loan institutions, building contractors etc. as a way to defend the interests of co-operative members.

57. Building co-operative and self-help housing encourages people to save because they realise that what they save will help to fund their own housing. Low-income earners can through housing co-operatives obtain loans from financing institutions to which they would not otherwise be entitled in view of their irregular incomes.

58. Because they have the wherewithal to acquire land, housing co-operatives can foster the ownership by individuals of the plots of land they occupy; this is one way of dealing with the problems of landstatus that confront people living in African cities, particularly those on low incomes. The problem of landstatus is the result of the contradiction between customary African law, according to which the land belongs to the first occupant, and the Western law, inherited from colonial times, in force in most African countries.

59. Housing co-operatives can lead to the emergence of co-operatives of other kinds such as credit and savings co-operations. They can diversify into other housing-related sectors, such as building materials manufacture, housing maintenance, furniture manufacture, handicrafts and the provision of miscellaneous services for co-operative members. In some European and Latin American countries housing co-operatives buy food at wholesale prices for their members arrange transport for children, and build leisure facilities and community amenities such as schools and dispensaries.

60. Assisted self-build projects are a fitting answer to the demand for housing and the financial limitations of low-income earners. They allow for flexibility on the part of the contractors and are of obvious socio-economic benefit in terms of the labour used and the knowledge of different aspects of housing construction that the labourers can pick up on the job.

18/ See reference 3, p.109.

61. In sum, co-operative and self-help housing projects and other forms of public participation could do more to improve socio-economic conditions for low-income earners and promote development in Africa if they were more thoroughly integrated into the general fabric of each country. They could then set an example to and stimulate other sectors of activity.

62. In addition to such general problems there are specific difficulties with funding and technical assistance. The existing systems for funding co-operative and self-help housing and other forms of public participation are rigid and inefficient; very few financial organizations or institutions will grant loans for such building projects. The reason is that the institutions have no guarantee that the debt will be repaid, partly because of the low and irregular earnings of the people concerned and partly because the quality of the actual building rules mortgaging out. Funding provided by public authorities is insufficient, and ill-suited to dealing with housing problems especially when the allocation of resources to different sectors of activities is poorly planned: the less resources one has, the more strictly they must be managed.

63. As regards technical assistance, experience in many African countries indicates a shortage of the competent project management services that would encourage private initiative. There is also a shortage of services to deal with miscellaneous administrative and technical problems in projects of this kind.

64. Broadly speaking, many African countries realise the importance of housing problems and the need to produce low-cost housing, but they do not provide themselves with the ways and means of promoting co-operative and self-help housing or other forms of public participation. Yet housing needs are always on the increase while the resources available in most countries are not growing so fast (see Annex V: GDP growth per capita).

C. Housing problems: scope and prospects

65. Taking the Ivory Coast as an example, it has been estimated in the light of high urban growth (10.5 per cent per year) and cumulative shortfalls in housing production that 175,000 housing units need to be built in Abidjan by 1990;^{19/} housing construction capacity was estimated at 6,000 units per year, and annual requirements at 25,000 units.

66. Between 1975 and the year 2000 the urban population in Africa will triple whereas on other continents it will only have doubled (see Annex III: demographic change in Africa); at this rate, it is been estimated ^{20/} that to meet the housing requirements of African city dwellers some 36 million additional housing units will have to be built by the year 2000 and 8 million more will have to be improved, representing an investment of 120 million United States dollars. Other studies ^{21/} indicate that to meet the same housing needs it will be necessary to invest from 5.9 to 6.5 per cent of city dwellers' total income in the housing sector (these cost estimates do not include the price of the land or the related road and service networks).

^{19/} E/ECA/HUS/6/Add.2, p.10.

^{20/} See reference 5, p.5.

^{21/} E/ECA/HUS/1, p.7.

67. According to a paper published by a research centre that specializes in the creation of affordable housing in Africa, ^{22/} a minimum of 500 French Francs must be spent on every square metre, irrespective of the housing policies and means of production employed, if one is to have high-quality housing; this seems an enormous sum compared with the means of low-income earners.

68. To produce 5.2 to 10 housing units per 1000 inhabitants per year (to satisfy the African countries' housing needs as referred to above), the United Nations has recommended investing at least 5 per cent of gross national product in the housing sector instead of the 2 per cent that many African countries actually do invest (see Annex V: IPI formula).

69. Analysis of this situation of housing for the masses as presented in the preceding pages has given rise to a number of guidelines and indicators for promoting co-operative housing, self-help housing and other forms of public participation in African countries.

GUIDELINES AND INDICATORS FOR PROMOTING CO-OPERATIVE AND SELF-HELP HOUSING AND OTHER FORMS OF PUBLIC PARTICIPATION

A. General context

70. In order to promote co-operative and self-help housing and other forms of public participation, African States need to create a general setting favouring the incorporation of such projects into the urban development process in accordance with national housing policy. There is a need for central and local permanent bodies (governmental, volunteer associations etc.) to take charge of the management of such projects and deal with the various legal, administrative and technical aspects.

71. The notions of co-operative housing and self-help housing need to be modified to suit the cultural and socio-economic conditions prevailing in African countries; it would be a mistake to seek to import successful formulas wholesale from other parts of the world to deal with Africa's housing problems.

72. The development of co-operative housing needs a point of departure, such as the creation of a municipal housing co-operative funded by the public authorities. Housing co-operatives could also be set up on a triangular base - State/employer/workforce - if a tax, legal and administrative system was set up to defend the interests of each of the parties; this would in essence amount to an improvement of a system which already exists in many African countries, under which the State and employers do provide financial support, however modest, for workers' housing.

B. Training, instruction and technical assistance

73. Africa as a whole does have centres that offer training in the construction of self-help housing, but there are very few concerned with co-operative housing. Training must be encouraged because the lack of competent staff is one of the principal reasons for the failure of housing co-operatives in Africa even though the traditional foundations

^{22/} See reference 4, p.7.

of African societies would favour the growth of co-operatives.

74. Training and instruction should be given first to civil servants, co-operative leaders and co-operative members who can in turn train other people and thus produce a critical mass of trained operatives. If there are enough participants, instruction and training can be given on the spot in the country. Training programmes will be drawn up in accordance with the need to develop co-operative and self-help housing in different countries, and will extend to such matters as legal and technical questions as well as project management.

75. Staff must be trained to deal with administrative procedure at the housing co-operative level: drawing up provisional statutes for legalizing co-operatives, providing advice and assistance on taxation matters, and miscellaneous administrative procedures (for example the standardization of applications to facilitate loans to co-operative members) etc.

76. The specialized project management staff will be concerned with the overall co-ordination of work, arranging supplies of building materials, organizing the labour force, and co-ordinating between the institutions funding projects and the building contractors.

77. The technical side of the training will cover architecture and engineering (preparation of specifications and quantity estimates, simple drainage techniques, etc.) and the use of local materials in housing construction projects for low-income owners.

78. In the case of assisted self-build schemes, the technical training will be more and whose ability to respond flexibly to the demand from low-income owners makes this sector of housing construction an efficient one. Experience has shown that self-build construction schemes run according to standard plans drawn up by the public authorities fall short of expectations; people agree to such schemes so as to secure the right to equipment of the plots they occupy, and in general the standard building plans are ignored.

C. Preferential allocation of land

79. The preferential allocation of plots which low-income owners can afford is an important factor in the development of co-operative and self-help housing schemes. African countries need to establish administrative, legal and taxation systems which will permit such preferential allocation in order to foster the work of housing co-operatives and the execution of schemes of this kind.

80. Such measures will permit the ownership by low-income earners of the plots which they occupy. The resulting security of tenure will encourage personal initiative and offer a safeguard to funding organizations and institutions which will probably invest more readily in the construction of co-operative and self-help housing.

D. Building codes and regulations

81. The introduction of building codes and regulations will help to ensure satisfactory quality (durability for example) in the housing constructed. This will encourage lending by funding institutions in as much as they will be able to apply technical standards in accordance with established procedures as a safeguard for their investment: "no trust,

hence no capital, hence no quality, hence no confidence, hence no capital,..." 23/

82. Building standards should be kept in line with socio-economic conditions in each individual country and encourage the use of local materials and building technologies compatible with the skills of locally available labour.

83. There are two approaches to the question of building codes and regulations: functional and descriptive. 24/

84. The functional approach specifies the use of specific building materials (fabric, facing, finishing) to ensure that buildings are suited to their environment (rainfall, sunshine, wind etc.). The descriptive approach stipulates the technical performances required of materials and the conditions under which they are to be used.

85. Although the functional approach is more suitable for research (for the development of new materials and technology) and the technical approach for building contractors, the two are complementary and help to ensure the quality of the housing constructed.

E. Promotion of local building materials

86. The use and promotion of local building materials can yield significant reductions in building costs if materials are produced in sufficient quantity. If they are, this will directly benefit the building of co-operative and self-help housing and other forms of public participation. African countries should create a climate generally conducive to the use and promotion of local building materials by means of administrative, legal and taxation measures and the development of building materials manufacturing industries.

87. The production of building materials includes the following: building materials, technical equipment, labour and know-how. The manufactured product is the more local if the factors of production are local.

88. Recent experience in African countries indicates an appreciable reduction in building costs thanks to use of local materials; according to whether one uses the modern or informal channels for the creation of housing, the savings can amount to 8 per cent or 21 per cent on the cost of the fabric, or 5 per cent and 10 per cent of the total cost of building. 25/

89. The use of local building materials also makes it possible to create housing that is architecturally better suited to the environment.

F. Funding for co-operative and self-help housing

90. Traditional funding systems need to be improved and better suited to the socio-economic circumstances of low-income earners. Other sources of funds also need to be found within the internal resources of each country.

91. Accordingly, the resources available to institutions that finance housing need to be increased so that they can grant several loans at once; such institutions must have substantial fixed capital since loans granted for housing purposes are generally of long maturity.

23/ Ibid.

24/ Ibid, p.21.

25/ See reference 2.

92. Bearing in mind the financial limitations of low-income earners, steps should also be taken to permit early repayment of the loans granted (for example, by lowering interest rates on loans).

93. It is important to encourage saving by co-operative members themselves; however small the sums involved, they will indicate a willingness to acquire housing and be an asset in negotiating loans with funding organizations. African countries should take steps to encourage the establishment of credit co-operatives and private investment in co-operative and self-help housing projects.

94. Housing co-operatives may be able to fund themselves by diversifying their activities into other sectors such as the manufacture of building materials for sale, and the provision of miscellaneous services to the public.

95. One recent and interesting trend in the funding of co-operative housing in African countries has been the formation of associations linking housing co-operatives in the industrialized and developing countries, these co-operatives then pool their resources for use in housing schemes in the various countries concerned.

G. Popular participation

96. Popular participation should be a basic feature of housing policies in Africa. As a corrective against the shortage of resources for housing construction in African countries, popular participation provides a means of mobilizing the unexploited human resources of the low-income earners who make up the majority of the urban population in Africa.

97. What is needed is a general atmosphere conducive to popular participation in the creation of co-operative and self-help housing. This can be brought about by administrative and legal measures. Popular participation can be brought about through public information on housing activities and a dialogue between the local authorities and population as part of the housing planning and construction process.

98. Public instruction on housing activities will not be of the traditional kind but will involve the practical development of people's knowledge the rudiments of building techniques (use of a level and plumb line, etc.), plans and reading simple construction drawings, etc.), so as to enhance the contribution they can make to housing construction.

99. Dialogue and co-operation between the public authorities and local people should make both sides aware of the extent of the housing problem and encourage their effective involvement in the search for different ways of dealing with it.

CONCLUSION

100. This document has not attempted to consider all the problems associated with guidelines and indicators for the promotion of co-operative and self-help housing and other forms of public participation. These are problems which have been addressed at length in many different papers.

101. It is the approach to the problem rather than the substance of the recommendations which we would regard as interesting. We propose a dynamic approach, stressing the need

to encourage housing of this kind so that African countries can break out of the formal framework of recommendations and acquire the ways and means of effectively promoting co-operative housing, self-help housing and other forms of public participation.

Distribution of national income

Region	Poorest 20 per cent	Poor 40 per cent	Modestly Well-off 20 per cent	Rich 15 per cent	Very Rich 5 per cent
	P O P U L A T I O N				
Asia	5,3	22,8	16,8	27,6	25,5
Africa	5,6	16,5	15,3	27,8	34,8
Latin America	4,3	19,2	19,4	24,8	32,8

Source : Annales de l'institut technique du bâtiment et des travaux publics (Paris, SARL LE BATIMENT) No. 386 (Septembre 1980), p.68.

Annex II

Average yearly urban growth
(average yearly rate over the previous five years)

	1950	1980	2000	2025
World	3,2	2,7	2,6	1,8
Africa	4,3	5,3	4,5	3,0
Latin America	4,6	3,6	2,5	1,8
North America	2,7	1,4	1,1	0,6
East Asia	5,1	2,9	2,7	1,4
South Asia	3,1	3,9	3,9	2,3
Europe	1,6	1,1	0,7	0,3
Oceania	3,1	2,1	1,5	0,8
USSR	3,9	2,0	1,3	0,9

Source : United Nations, Demographic indicators of countries :
Estimates and projections as assessed in 1980 (New York, 1982), p.39.

Total population and urban population (urban population as a percentage of the

Region	1960		
	Total pop.	Urban pop. (%)	Total pop.
Africa	258 108 (13)	33 630	532 06 (21)
East Africa	75 693 (7)	5 478	100 22
Central Africa	34 940 (18)	6 555	42 04
North Africa	65 133 (30)	19 514	83 62
Southern Africa	1,091 (2)	35	2 114
West Africa	80 651 (13)	10 838	105 652

Source : derived from Demographic handbook f

Population growth in Africa

(ECA member States)

(thousands of inhabitants) and
total

1970	1980		1990		2000	
Urban pop. (%)	Total pop.	Urban pop. (%)	Total pop.	Urban pop. (%)	Total pop.	Urban pop. (%)
70 311 (21)	445 497	120 701 (27)	606 127	205 876 (34)	828 454	337 827 (41)
10 423 (10)	136 133	21 148 (15)	189 071	41 834 (22)	255 552	77 739 (29)
10 531 (23)	84 414	18 769 (24)	71 904	31 644 (44)	96 072	30 187 (32)
30 736 (37)	108 130	57 637 (44)	143 750	73 787 (51)	165 671	107 341 (58)
123 (6)	2 305	309 (11)	3 782	680 (18)	5 156	1 317 (25)
18 499 (17)	143 796	32 839 (23)	197 610	57 930 (29)	275 002	100 891 (37)

for Africa, 1982 (UNECA) (forthcoming)

Per capita growth in gross domestic product (GDP)
(US dollars)
(ECA member States)

	1960	1965	1970	1975	1980	1983
Africa	138	153	234	257	283	265
North Africa	199	225	275	321	406	396
West Africa	120	137	178	203	205	172
Central Africa	130	120	131	125	121	119
East Africa	96	109	131	127	123	118

Source : ECA Statistics Division, national accounts printouts.

Investment-production-income (IPI) formula
 Relation between the proportion of GDP invested annually in
 the housing sector, the number of housing units built and the
income of the households needing housing

$$P_{ih} = \frac{h_a \times O_c \times f}{1000}$$

Where

- P_{ih} = percentage of GDP invested in housing
 h_a = number of housing units built annually per 1000 population
 O_c = average number of occupants per housing unit
 f = $\frac{\text{cost of land development and construction}}{\text{average annual income of households needing housing}}$

Source: United Nations Economic Commission for Africa, Human settlements in Africa, the role of housing and building (Addis Ababa, 1976) p.145.

Note: The aim of this annex is not to set forth a complicated calculation but to demonstrate the existence of a direct relation between the number of housing units built yearly per 1000 population and the extent of investment in the housing sector.

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